DOCKET NO.: CELL-0315 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Alastair David Griffiths Lawson, et al. Confirmation No.: 2+2

Application No.: 10/578,384 Group Art Unit: 1645

Filing Date: January 16, 2007 Examiner: Not yet assigned

For: Method For The Treatment Of Inflammatory Bowel Disease

ELECTRONICALLY FILED DATE OF DEPOSIT: August 27, 2007

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.56 and in accordance with 37 CFR §§ 1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 CFR § 1.56(b).

In accordance with § 1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of the above identified application as set forth in § 1.491, before the mailing date of a first Office Action on the merits of the above-identified application, or before the mailing date of a first Office Action after the filing of request for continued examination under § 1.114, no additional fee is required.

DOCKET NO.: CELL-0315 - 2 -**PATENT** \boxtimes Copies of reference numbers 39-123 listed on the attached Form PTO-1449 are enclosed herewith. \boxtimes Copies of reference numbers 1-38 on the attached Form PTO 1449 are not required to be submitted pursuant to 37 CFR § 1.98(a)(2)(ii). Copies of references are not being submitted because they were previously cited by or submitted to the U.S. Patent and , filed Trademark Office in patent application number for which a claim for priority under 35 U.S.C. § 120 has been made in the instant application. The relevance of those listed references which are not in the English language is as follows: There are no listed references which are not in the English language. Please charge any deficiency or credit any overpayment to Deposit Account No. 23-3050. /Jane E. Inglese/ Date: August 24, 2007 Jane E. Inglese

Registration No. 48,444

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Docket No. Application No. Form PTO-1449 Modified 10/578,384 CELL-0315 List of Patent and Publications **Applicant** Cited by Applicant Alastair David Griffiths Lawson, et al. (Use several sheets if necessary) U.S. Department of Commerce Group Filing Date Patent and Trademark Office January 16, 2007 1645 Confirmation No.

U. S. PATENT DOCUMENTS

1913

Examiner Initial		Document No.	Date	Name	Class	Subclass
	1	4,439,196	03/27/84	Higuchi	604	890
	2	4,447,224	05/08/84	DeCant, Jr. et al.	604	67
	3	4,447,233	05/08/84	Mayfield	604	152
	4	4,475,196	10/02/84	La Zor	371	29
	5	4,486,194	12/04/84	Ferrara	604	897
	6	4,487,603	12/11/84	Harris	604	152
	7	4,596,556	06/24/86	Morrow et al.	604	70
	8	4,790,824	12/13/88	Morrow et al.	604	143
	9	4,941,880	07/17/90	Burns	604	143
	10	4,946,778	08/07/90	Ladner et al.	435	69.6
	11	4,980,286	12/25/90	Morgan et al.	435	172.3
	12	5,064,413	11/12/91	McKinnon et al.	604	70
	13	5,219,996	06/15/93	Bodmer et al.	530	387.3
	14	5,223,409	06/29/93	Ladner et al.	435	69.7
	15	5,312,335	05/17/94	McKinnon et al.	604	72
	16	5,383,851	01/24/95	McKinnon, Jr. et al.	604	68
	17	5,399,163	03/21/95	Peterson et al.	604	68
	18	5,403,484	04/04/95	Ladner et al.	435	235.1
	19	5,427,908	06/27/95	Dower et al.	435	5
	20	5,516,637	05/14/96	Huang et al.	435	6

EXAMINER	DATE CONSIDERED
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Docket No. Application No. Form PTO-1449 Modified CELL-0315 10/578,384 List of Patent and Publications **Applicant** Cited by Applicant Alastair David Griffiths Lawson, et al. (Use several sheets if necessary) U.S. Department of Commerce Group Filing Date Patent and Trademark Office January 16, 2007 1645 Confirmation No.

U. S. PATENT DOCUMENTS

1913

Examiner Initial		Document No.	Date	Name	Class	Subclass
	21	5,571,698	11/05/96	Ladner et al.	435	69.7
	22	5,580,717	12/03/96	Dower et al.	435	5
	23	5,585,089	12/17/96	Queen et al.	424	133.1
	24	5,658,727	08/19/97	Barbas et al.	435	6
	25	5,677,425	10/14/97	Bodmer et al.	530	387.1
	26	5,698,426	12/16/97	Huse	435	172.3
	27	5,733,743	03/31/98	Johnson et al.	435	69.1
	28	5,738,996	04/14/98	Hodges et al.	435	7.1
	29	5,750,753	05/12/98	Kimae et al.	556	440
	30	5,780,225	07/14/98	Wigler et al.	435	6
	31	5,807,683	09/15/98	Brenner	435	7.1
	32	5,821,047	10/13/98	Garrard et al.	435	5
	33	5,932,595	08/03/99	Bender et al.	514	317
	34	5,969,108	10/19/99	McCafferty et al.	530	387.3
	35	2002/0176847 A1	11/28/02	Rajavashisth	424	93.2
	36	2004/0235960 A1	11/25/04	Burns et al.	514	649
	37	2005/0020619 A1	01/27/05	Betschmann et al.	514	301
	38	2005/0059113 A1	03/17/05	Bedian et al.	435	69.1

EXAMINER	DATE CONSIDERED

Form PTO-1449 Modified

List of Patent and Publications
Cited by Applicant
(Use several sheets if necessary)

U.S. Department of Commerce Patent and Trademark Office Docket No. CELL-0315

Application No. 10/578,384

Applicant

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FOREIGN PATENT DOCUMENTS

Examiner					Transla	
Initial		Document No.	Date	Country	YES	NO
	39	0 392 745 B1	11/02/94	EP		
	40	0 948 544 B1	05/02/03	EP		
	41	1 223 980 B1	05/21/03	EP		
	42	00/67777 A1	11/16/00	WO		
	43	01/30381 A2	05/03/01	WO		
	44	02/087496 A2	11/07/02	WO		
	45	03/020698 A2	03/13/03	WO		
	46	2004/051268 A1	06/17/04	WO		
	47	2005/003169 A2	01/13/05	WO		
	48	2005/003170 A2	01/13/05	WO		
	49	2005/003171 A2	01/13/05	WO		
	50	2005/010009 A1	02/03/05	WO		
	51	2005/012226 A1	02/10/05	WO		
	52	2005/030124 A2	04/07/05	WO		
	53	86/01533 A1	03/13/86	WO		
	54	90/02809 A1	03/22/90	WO		
	55	91/10737 A1	07/25/91	WO		
	56	92/01047 A1	01/23/92	WO		
	57	92/02551 A1	02/20/92	WO		

EXAMINER	DATE CONSIDERED
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Form PTO-1449 Modified	Docket No. CELL-0315	Application No. 10/578,384
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)	Applicant Alastair David Griffiths Lawson, et al.	
U.S. Department of Commerce Patent and Trademark Office	Filing Date January 16, 2007	Group 1645
	Confirmation No. 1913	

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.		Transl	Translation	
	Do		Date	Country	YES	NO
	58	92/18619 A1	10/29/92	wo		
	59	92/22853 A1	12/23/92	wo		
	60	93/08829 A1	05/13/93	WO		
	61	93/11236 A1	06/10/93	WO		
	62	95/15982 A2	06/15/95	wo		
	63	95/20401 A1	08/03/95	wo		
	64	98/25971 A1	06/18/98	WO		
	65	99/15549 A2	04/01/99	wo		
	66	99/43839 A1	09/02/99	wo		

EXAMINER	DATE CONSIDERED
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	-1449 Modified	Docket No. CELL-0315	Application No. 10/578,384	
Cited b	t and Publications by Applicant sheets if necessary)	Applicant Alastair David Griffiths Lawson, et al.		
	nent of Commerce Frademark Office	Filing Date January 16, 2007	Group 1645	
		Confirmation No. 1913		
NON-PAT	ENT DOCUMENTS (Inc	cluding Author, Title, Date	, Pertinent Pages, Etc.)	
67			m a combinatorial phage display <i>Methods</i> , 1995, 184, 177-186	
68	Babcook, J. et al., "A novel strategy for generating monoclonal antibodies from single, isolated lymphocytes producing antibodies of defined specificities," <i>Proc. Natl. Acad. Sci. USA</i> , 1996, 93(15), 7843-7848			
69	Bollard, C. "Adapting a transforming growth factor beta-related tumor protection strategy to enhance antitumor immunity," <i>Blood</i> , 99, 3179-3187			
70	Brinkman, U. et al., "Phage display of disulfide-stabilized Fv fragments," J. Immunol. Methods, 1995, 182, 41-50			
71	Burton, D. R. et al., "Human Antibodies from Combinatorial Libraries," <i>Adv. Immunol.</i> , 1994, 57, 191-280			
72	Carrell, T. et al., "A Novel Procedure for the Synthesis of Libraries Containing Small Organic Molecules," <i>Angew. Chem. Int. Ed. Engl.</i> , 1994, 33(20), 2059-2061			
73	Cecchini, M. G. et al., "Role of colony stimulating factor-1 in the establishment and regulation of tissue macrophages during postnatal development of the mouse," <i>Development</i> , 1994, 120(6), 1357-1372			
74	Cerretti, D. P. et al., "Human Macrophage-Colony Stimulating Factor: Alternative Rna And Protein Processing From A Single Gene," <i>Mol. Immunol</i> , 1988, 25, 761-770			
75	Chapman, A. P., "PEGylated antibodies and antibody fragments for improved therapy: a review," <i>Advanced Drug Delivery Reviews</i> , 2002, 54, 531-545			
76	Cho, C. Y. et al., "An Ur	nnatural Biopolymer," Science	ce, 1993, 261, 1303-1305	
77	Cole, S. P. C. et al., "The Ebv - Hybridoma Technique And Its Application To Human Lung Cancer," <i>Monoclonal Antibodies and Cancer Therapy</i> , 1985, pp. 77-96, Alan R. Liss, Inc.			
78	-	nicopathologic Study Of Des olitis," <i>Laboratory Investigat</i>		

EXAMINER DATE CONSIDERED

Form PTO	-1449 Modified	Docket No. CELL-0315	Application No. 10/578,384	
Cited b	t and Publications by Applicant cheets if necessary)	Applicant Alastair David Griffiths Lawson, et al.		
	nent of Commerce Frademark Office	Filing Date January 16, 2007	Group 1645	
		Confirmation No. 1913		
NON-PAT	ENT DOCUMENTS (Inc	cluding Author, Title, Date	, Pertinent Pages, Etc.)	
79			ng large libraries of peptides Natl. Acad. Sci. USA, 1992, 89,	
80		tides on phage: A vast library		
81		lom Peptide Libraries: A Sou		
	Protein Binding Molecul	es," <i>Science</i> , 1990, 249, 404	-406	
82	DeWitt, S. H. et al., ""D	viversomers": An approach to	nonpeptide, nonoligomeric	
	chemical diversity," Proc. Natl. Acad. Sci. USA, 1993, 90, 6909-6913			
83	Dubowchik, G. M. et al., "Receptor-mediated and enzyme-dependent targeting of cytotoxic anticancer drugs," <i>Pharmacol. Ther.</i> , 1999, 83, 67-123			
84	Elson, C. O. et al., "Experimental Models Of Inflammatory Bowel Disease," <i>Gastroenterology</i> , 1995, 109(4), 1344-1367			
85	Erb, E. et al., "Recursive deconvolution of combinatorial chemical libraries," <i>Proc. Natl. Acad. Sci. USA</i> , 1994, 91, 11422-11426			
86			ge Library of Oligopeptides ol. Biol., 1991, 222, 301-310	
87	Fiocchi, C., "Inflammatory Bowel Disease: Etiology And Pathogenesis Gastroenterol., 1998, 115, 182-205			
88	Fodor, S. P. A., "Multipl 1993, 364, 555-556	exed biochemical assays wit	h biological chips," Nature,	
89	Gallop, M. A. et al., "Applications of Combinatorial Technologies to Drug Discovery. 1. Background and Peptide Combinatorial Libraries," <i>J. Med. Chem.</i> , 1994, 37(9), 1233-1251			
90	Haran-Ghera, N. et al., "Increased circulating colony-stimulating factor-1 (CSF-1) in SJL/J mice with radiation-induced acute myeloid leukemia (AML) is associated with autocrine regulation of AML cells by CSF-1," <i>Blood</i> , 1997, 89(7), 2537-2545			
91	Hellström, K. E. et al., "Antibodies for Drug Delivery," <i>Controlled Drug Delivery</i> , 2 nd Ed., Robinson et al., <i>eds.</i> , 1987, pp. 623-653			

DATE CONSIDERED

EXAMINER

Form PTO-1449 Modified		Docket No. CELL-0315	Application No. 10/578,384
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)		Applicant Alastair David Griffiths Lawson, et al.	
	nent of Commerce Trademark Office	Filing Date January 16, 2007	Group 1645
		Confirmation No. 1913	
NON-PATI	ENT DOCUMENTS (Inc	cluding Author, Title, Date,	Pertinent Pages, Etc.)
92	Hoshida, T. et al., "Gene therapy for pancreatic cancer using an adenovirus vector encoding soluble flt-1 vascular endothelial growth factor receptor," <i>Pancreas</i> , 2002, 25(2), 111-121		
93	Houghten, R. A. et al., "The Use of Synthetic Peptide Combinatorial Libraries for the Identification of Bioactive Peptides," <i>Bio/Techniques</i> , 1992, 13(3), 412-421		
94	Ikuno, Y., "An in vivo gene therapy approach for experimental proliferative vitreoretinopathy using the truncated platelet-derived growth factor α receptor," <i>Invest Ophthalmol. Vis. Sci.</i> , 2002, 43(7), 2406-2411		
95	Jacoby, D. R. et al., "An In Vivo Gene Therapy Approach for Experimental Proliferative Vitreoretinopathy Using the Truncated Platelet-Derived Growth Factor α Receptor," <i>Gene Therapy</i> , 1997, 4, 1282-1283		
96	Kettleborough, C. A. et al., "Isolation of tumor cell -specific single-chain FV from immunized mice using phage-antibody libraries and the re-construction of whole		
	antibodies from these antibody fragments," Eur. J. Immunol., 1994, 24, 952-958		
97	Klebl, F. H. et al., "Expression of macrophage-colony stimulating factor in normal and inflammatory bowel disease intestine.," <i>J. Pathol.</i> , 2001, 195(5), 609-615		
98	Kochanek, S., "High-Capacity Adenoviral Vectors for Gene Transfer and		
	Somatic Gene Therapy," Human Gene Therapy, 1999, 10, 2451-2459		
99	Kohler, G. & Milstein, C., "Continuous Cultures of Fused Cells Secreting Antibody of Predefined Specificity," <i>Nature</i> , 1975, 256, 495-497		
100	Kozbor, D. et al., "The production of monoclonal antibodies from human lymphocytes," <i>Immunology Today</i> , 1983, 4(3), 72-79		
101	Lam, K. S., "Application of combinatorial library methods in		
	cancer research and drug	discovery," Anticancer Drug	g Des., 1997, 12, 145-167
102	Lam, K. S., et al., "A new type of synthetic peptide library for identifying ligand-binding activity," <i>Nature</i> , 1991, 354, 82-84		
103	Lee, E. J. et al., "Adenovirus-directed expression of dominant negative estrogen receptor induces apoptosis in breast cancer cells and regression," <i>Mol. Med.</i> , 2001, 7(11), 773-782		

EXAMINER	DATE CONSIDERED
----------	-----------------

Form PTO-1449 Modified		Docket No. CELL-0315	Application No. 10/578,384	
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)		Applicant Alastair David Griffiths Lawson, et al.		
	U.S. Department of Commerce Patent and Trademark Office		Filing Date January 16, 2007	Group 1645
			Confirmation No. 1913	
NON-PA	ATE	ENT DOCUMENTS (Inc	cluding Author, Title, Da	te, Pertinent Pages, Etc.)
1	04	Makiyama, K. et al., "Serum concentration of macrophage colony stimulating factor (M-CSF) in patients with inflammatory bowel disease," <i>Gastroenterol. Jpn.</i> , 1993, 28(5), 740		
1	.05	Marotta, F. et al., "Disrupted mucosal barrier in quiescent ulcerative colitis: Effect of metronidazole and of a symbiotic preparation in a pilot cross-over study," <i>Chinese Journal of Digestive Diseases</i> , 2003, 4(4), 180-185		
1	.06	Metcalf, D., "Studies On Colony Formation In Vitro By Mouse Bone Marrow Cells. II. Action Of Colony Stimulating Factor," <i>J. Cell Physiol.</i> , 1970, 76(1), 89-99		
1	.07	Miller, A. D. et al., "Use of Retroviral Vectors for Gene Transfer and Expression," Meth. Enzymol., 1993, 217, 581-599		
1	.08	Milstein, C. et al., "Hybrid hybridomas and their use in immunihistochemistry," <i>Nature</i> , 1983, 305, 537-539		
1	09	Mizoguchi, A. et al., "Immune networks in animal models of inflammatory bowel disease," <i>Inflammatory Bowel Disease</i> , 2003, 9(4), 246-259		
1	10	Persic, L. et al., "An integrated vector system for the eukaryotic expression of antibodies or their fragments after selection from phage display libraries," <i>Gene</i> , 1997, 187, 9-18		
1	.11	Podolsky, D. K., "Inflammatory Bowel Disease," N. Engl. J. Med., 2002, 347(6), 417-429		
1	12	Reynolds, P. N. et al., "Chimeric viral vectors – the best of both worlds?," <i>Molecular Medicine Today</i> , 1999, 1, 25-31		
1	13	Robbins, P. D. et al., "Viral Vectors for Gene Therapy," <i>Pharmacol. Ther.</i> , 1998, 80, 35-47		
1	14	Roth and Stanley, Current Topics in Microbiology and Immunology, 1992, 181, 141-167		
1	15	Sandborn, W. J., "A Review Of Immune Modifier Therapy For Inflammatory Bowel Disease: Azathioprine, 6-Mercaptopurine, Cyclosporine, And Methotrexate," <i>Am. J. Gastroenterol.</i> , 1996, 91(3), 423-432		
1	16	Sandborn, W. J., "Biologic Therapy Of Inflammatory Bowel Disease," Gastroenterol., 2002, 122, 1592-1608		

EXAMINER	DATE CONSIDERED
----------	-----------------

Form PTO	Form PTO-1449 Modified		Application No. 10/578,384		
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	nent of Commerce Trademark Office	Filing Date January 16, 2007	Group 1645		
		Confirmation No. 1913			
NON-PAT	NON-PATENT DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)				
117	Scott, J. K. et al., "Searching for peptide ligands with an epitope library," <i>Science</i> , 1990, 249, 386-390				
118	Thorpe, P. E. et al., "The Preparation and Cytotoxic Properties of Antibody-Toxin Conjugates," <i>Immunol. Rev.</i> , 1982, 62, 119-158				
119	Traunecker, A. et al., "Bispecific single chain molecules (Janusins) target cytotoxic lymphocytes on HIV infected cells," <i>EMBO J.</i> , 1991, 10(12), 3655-3659				
120	Verma, R. et al., "Antibody engineering: Comparison of bacterial, yeast, insect and mammalian expression systems," <i>J. Immunol. Meth.</i> , 1998, 216, 165-181				
121	Weir, E. C. et al., "Colony Stimulating Factor-1 Plays A Role In Osteoclast Formation And Function In Bone Resorption Induced By Parathyroid Hormone And Parathyroid Hormone-Related Protein," <i>J. Bone Miner. Res.</i> , 1996, 11(10), 1474-1481				
122	Wu, G. Y. et al., "Receptor-mediated in Vitro Gene Transformation by a Soluble DNA Carrier System," <i>J. Biol. Chem.</i> , 1987, 262(10), 4429-4432				
123	Zuckermann, R. N. et al., "Discovery of Nanomolar Ligands for 7-Transmembrane G-Protein-Coupled Receptors from a Diverse N-(Substituted)glycine Peptoid Library," <i>J. Med. Chem.</i> , 1994, 37, 2678-2685				